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## **AMENDMENTS TO THE CLAIMS**

1. Canceled.

2. (previously presented) A brushless DC motor comprising:  
a rotor having plural permanent magnets; and  
a stator having plural slots,  
wherein said rotor is divided into three rotor blocks in a rotation axis direction, and said  
three rotor blocks are layered so that arrangement angles of said rotor blocks differ from each other  
by an amount of a mechanical angle in a rotary direction that is equivalent to one third of a pulsation  
period of cogging torque generated by said rotor and stator;

The brushless DC motor of claim 1, wherein a sum of an effective polar opening angle of one of said permanent magnets and a difference between the arrangement angles of said rotor block located on one end and said rotor block located on the other end is not more than a pole pitch angle of said rotor.

**3. Canceled.**

4. (previously presented) A brushless DC motor comprising:  
a rotor having plural permanent magnets; and  
a stator having plural slots,  
wherein each of said permanent magnets is divided into three permanent magnets in a  
rotation axis direction, and said three permanent magnets are layered so that arrangement angles of  
said permanent magnets differ from each other by an amount of a mechanical angle in a rotary







wherein said rotor comprises convex portions corresponding to the magnetic poles on its circumference, and the magnetic poles of said rotor include magnetic poles whose magnet deviation angle formed by a central line of an effective polar opening angle and the central line of said magnet mounting hole and whose convex portion deviation angle formed by a central line of said convex portion and a central line of said magnet mounting hole are both first angle; and magnetic poles whose magnet deviation angle and convex portion deviation angle are both second angle different from the first angle.

15. (withdrawn) A brushless DC motor comprising:

a stator constructed by layering plural steel plates, said stator including a yoke on an outer circumferential portion, plural teeth extending from said yoke toward a central portion, and notch portions or cavity portions in an outer circumferential surface of said yoke,

wherein said steel plates are layered while displacing said steel plates at a predetermined angle in a circumferential direction so that a length of said notch portions or said cavity portions of each of said teeth in a layering direction of said steel plates is substantially equal.

16. (withdrawn) The brushless DC motor of claim 15,

wherein a substantially equal number of said steel plates are layered at an equal angle to form blocks, and said steel plates are layered while displacing said blocks at a predetermined angle in a circumferential direction.

17. (withdrawn) The brushless DC motor of claim 15,

wherein said notch portions or cavity portions are formed in said steel plates for every other tooth.

